



ENERGY HARVESTING PROGRAM REVIEW

13-14 April 2000

MEETING PURPOSE

- **Exchange Technical Information Between Performers, DARPA Program Managers, and Military Operators**
- **Foster Collaborations Between Performers**
- **Determine the Status of Energy Harvesting Projects**
- **Assess Technology Impact on Commercial and DoD Products**
- **Identify Transition Opportunities – Commercial and DoD**
- **Recommend Future Research and Development Activities**



ENERGY HARVESTING PROGRAM REVIEW

13-14 April 2000

DISCUSSION QUESTIONS

- **What is the expected figure of merit for your technology, i.e., What is the output power expected? ...for what input power? What is the expected weight and volume for a system that would produce this power level? Comment on scaling laws for your technology.**
- **What military applications appear to be good candidates for your system? What would the impact be?**
- **What commercial applications appear to be good candidates for your system? What would the impact be?**
- **What needs to be done to get your technology ready for these applications? Will this be done in the context of the program? If not, what additional resources are required to develop a prototype system?**

PRESENTATIONS

ENVIRONMENTAL FUELS

- Marine Sediments
- Methane Hydrates
- Glucose, Carbohydrates
- ATP

MECHANICAL

- Heel Strike
- Mechanical Eels

SOLAR

- Photovoltaics
- Rectennas

RADIOACTIVE SOURCES

- Icosahedral Borides

THERMAL

- Thermoelectric Materials
- Ground-Source Heat Engines

USER PERSPECTIVES

- Army
- MIT Media Lab
- United Technologies